

sensoria are present; apex with inconspicuous pale setae; length of club 0.129-0.143 mm.; its greatest width 0.028 mm. Under high magnification the mesonotum and scutellum present a somewhat granular appearance with only a very faint indication of reticulation in contrast to the distinct reticulation that is present in *E. corni* Hald. Ovipositor short, slightly exerted but plainly visible from above.

Male.—No males have been reared by the writer but Hempel states that the male is also pale yellow in color and figures the male antenna as being three-jointed; the pedicel triangular, the club long and cylindrical with numerous sensoria present.

The above description is based on six females reared from *Aleurothrixus floccosus* (Maskell) at Damien, Haiti, June 17, 1930, and fifteen females reared from the same aleyrodid on *Lignum-vitae*, *Guajacum officinale*, at Sarthe, Haiti, January 31, 1931 by the writer.

TWO UNDESCRIBED CHALCID PARASITES OF THE WOOLLY WHITEFLY, *ALEUROTHRIXUS FLOCCOSUS* (MASKELL), FROM HAITI.

By HERBERT L. DOZIER.

The two new species described in the present paper were reared as primary parasites of the Woolly Whitefly, *Aleurothrixus floccosus* (Maskell), by the writer while Entomologist for the Service Technique de l'Agriculture at Port-au-Prince, Haiti. Both species are abundant at times in that country and are second only to *Encarsia cubensis* Gahan in efficiency in checking the increase of their host.

In addition, a full description is given of both sexes of *Prospaltella brasiliensis* Hempel, reared from the same host. This represents the rediscovery and first recognition of this species since the description of the female in 1904, published in Portuguese and in an obscure and inaccessible publication. Both Drs. Howard and Mercet seem to have overlooked the description of this species. The male is now associated with the female and described herewith. The species appears to be correctly placed in *Prospaltella* and the writer suspects that what Prof. Stuardo records (Carlos Stuardo, Revista Chilena de Historia Natural, vol. xxxii, pp. 154-157, 1928) as *P. conjugata* Masi, reared from *Aleurothrixus porteri* Quaint. in Chile, represents the male of this species.

Encarsia haitiensis, new species.

Belongs to the group of *Encarsia* having the middle tarsi 4-jointed. In general appearance and size very close to *E.*

basicincta Gahan from the same host in Porto Rico but distinguished at once by its distinctly larger and wider forewing, lack of vitta at base of abdomen, and four-jointed tarsi. It is perhaps closest to *meritoria* Gahan but distinguishable at once by its darker yellow color and especially by the longer ovipositor (measured from origin to apex).

Female.—Length, including ovipositor, 0.53 mm.; expanse 1.06 mm.; greatest width of forewing 0.165 mm. General color a dirty pale yellow, almost white; the vertex distinctly brown with sometimes a reddish cast; the pro- and mesonotum slightly more yellowish; the scutellum, the axillae, propodeum, and basal segment of abdomen narrowly, as well as the distal third of abdomen, clouded with light brown giving a somewhat soiled or dirty indistinct coloring. Antennae dirty yellowish-testaceous, the scape somewhat paler. Legs pale. Tip of ovipositor fuscous. Antennae long and slender, slightly over half the length of the body; not clavate, all funicle and club joints subequal in width and in length except the first funicle joint, which is short, narrower than the pedicel, slightly more than half as long as the second funicle; the terminal joint somewhat pointed; scape long and rather slender; pedicel almost twice as long as wide. Head and mesonotum granular and slightly wrinkled. Eyes bare. Mesonotum distinctly longer than the scutellum. Mesonotum with two pairs of very pale and very inconspicuous setae. Scutellum very lightly reticulate under high magnification; a pair of pale setae discernible with difficulty, located just adjacent to and to the outside of the pair of circular spiracles which resemble bases for the setae that are found on the disk of the scutellum; a second pair of larger but inconspicuous setae are located near the posterior margin of the scutellum. Forewings fairly broad, hyaline, marginal fringe rather short, the longest cilia about one-fourth as long as the breadth of the wing; distal two-thirds of wing more or less completely covered with cilia, without distinct bare areas. Middle tarsi four-jointed, the others five-jointed. Ovipositor distinctly exerted, clearly visible to its base.

Male.—Unknown.

Described from eighteen females on eight slides, reared by the writer from *Aleurothrixus floccosus* (Maskell) on *Spondias mombin*, at Damien, Haiti, December 13–16, 1930; and two females on slide, reared from same host on *lignumvitae*, *Gua-jacum officinale*, at Sarthe, Haiti, January 16, 1931. There are at hand three females, reared by the writer from *Aleurothrixus* n. sp. on *Catalpa longissima* at Damien, Haiti, March 6–9, 1931, which although somewhat deeper colored appear to be this species.

Type female mounted in balsam on slide together with one paratype female and a female of *Prospaltella brasiliensis* Hempel, Damien, Haiti, Dec. 15, 1930, and a second slide containing three paratype females, deposited in U. S. National Museum collection.

Euderomphale Girault.¹

The genus *Euderomphale* was described by Girault in 1916 and placed in the Eulophidae (Omphalini). The genotype species *E. fuscipennis* Gir. was synonymized with *Pteropterix flavimedia* Howard by P. H. Timberlake. Essig in his "Insects of Western North America" places *Euderomphale flavimedia* (Howard) under the family Entedontidae. According to Nowicki, Howard's interpretation of *Pteropterix* was not correct and he has proposed (Neue Beitrag System. Insektenkunde, vol. 4, pp. 155-160, 1929) a new name for *Pteropterix* Howard (not Westwood), calling it *Aleurodiphagus*. As *Euderomphale* is the older name and is certainly *Pteropterix* Howard it must be employed for all those species described by Dr. Howard from the Islands of Grenada and St. Vincent in the West Indies under the generic name *Gyrolasia*, namely *Euderomphale bicolor*, *ciliata*, *femorata*, *metallica* and *flava*. The species described herewith from Haiti appears to be very distinct from any of these.

To date the only published information we have of the habits of the members of this genus is the record of *E. flavimedia* Howard, reared in California and New Mexico from different species of aleyrodids, and Nowicki's notes. In addition to the new species, the writer has also reared two other undescribed species of *Euderomphale* from West Indian aleyrodids, further strengthening the evidence that members of this genus are all primary parasites of aleyrodids.

Euderomphale aleurothrixi, new species.

Female.—Length 0.587-717 mm.; expanse 1.286-1.362 mm.; greatest width of forewing 0.229 mm. General color of head and thorax yellowish-orange, the pronotum and anterior margin of the mesonotum at middle, infuscated; lateral margins of the mesonotum and posterior margins of the scutellum and metanotum narrowly infuscated; abdomen of a more flavous color with the apical half fuscous, darkest across the middle; antennae and legs pale grayish; eyes black; ocelli red. Antennae sparsely hairy, scape long and slender, a short seta at tip; pedicel longer than wide, provided with three very distinct setae; two ring-joints very narrow and short and easily overlooked; funicle joint following, shorter than pedicel but slightly wider; club three-jointed, the first joint the widest, the second and third tapering to a point; the funicle joint and club with longitudinal sensoria. Eyes naked, the margin of the vertex with eight prominent setae and the middle ocellus with three less prominent setae adjacent. Anterior margin of mesonotum provided with setae, one situated on each side of the mesonotum just behind the anterior margin; about midway on the scutellum, on each side a short distance in from the margin is placed a very prominent bristle or seta. The forewing is hyaline except for a clouding across

¹1916 Girault, Canadian Entomologist, vol. 48, p. 410.

the middle beneath the grayish-yellow marginal vein. Abdomen sessile, conic-ovate, the ovipositor scarcely visible from above.

Male.—Length, exclusive of exserted genitalia, 0.417–.545 mm. Decidedly smaller in size than the female and its general color is darker. The fuscous markings of the thorax of the female are much darkened in the male. The abdomen is slightly more ovate and soiled in appearance, the apical half dark fuscous; the exserted genitalia paler in color.

Described from a series of forty males and thirteen females, reared by the writer from *Aleurothrixus floccosus* (Maskell) on *Guajacum officinale* at Sarthe, Haiti, February 3–4, 1931. From this same material *Encarsia cubensis* Gahan, *Encarsia haitiensis* Dozier, and *Eretmocerus paulistus* Hempel issued at the same time. A single female reared by the writer from the same host on *Lignum-vitae* at Central Aguirre, Porto Rico, June 28, 1925 is undoubtedly the same species but the general color is a shade deeper. A series of twenty-three badly shriveled and broken females, reared by Dr. S. C. Bruner from the same host at Santiago de las Vegas, Cuba, January, 1931, also appear darker but are undoubtedly the same species. This shows that the species is widely distributed in the West Indies.

The type slide containing holotype female and allotype male together with a paratype male is deposited in the U. S. National Museum collection.

Prospaltella brasiliensis (Hempel).²

The following redescription of the species is based on a translation of the original description from Portuguese and a series of thirteen females and eight males, reared by the writer from *Aleurothrixus* n. sp. on *Prunus myrtifolia* at Kenskoff, Haiti, November 5–8, 1929, and eight females reared by the writer from *Aleurothrixus floccosus* (Maskell) on *Spondias mombin* at Damien, Haiti, December 11–15, 1930.

Female.—Length, exclusive of ovipositor, 0.47 mm.; ovipositor 0.06 mm.; expanse 1.47 mm.; greatest width of forewing 0.165 mm. General color a clear yellowish-orange except the vertex, pronotum and anterior portion of the mesonotum, and a broad horizontal band covering about one-third the length of the abdomen just before its tip, light brown; antennae pale brown, the scape pale yellowish-white; ocelli red; legs yellowish-white; the ovipositor prominent, distinctly exserted, yellowish in color, becoming black at the tip. Eyes hairy. The first funicle joint only half as long as and distinctly narrower than the pedicel or the second joint, the remaining funicle joints being subequal in length, increasing only slightly in width; the pedicel characteristically elongately reticulated, the other joints supplied with numerous setae. Mesonotum under high

²1904 Hempel, Bol. Agr. Sao Paulo, Brazil, Vol. 5, fig. 3, *Prospalta*.

magnification appears granular, very coarsely and indistinctly reticulate, a pair of long pale colored setae located in the upper angles close to the lateral margin and a second pair on the lower portion. Scutellum similar, with two pair of pale setae. Forewings hyaline, venation clear, finely ciliate except at base, marginal fringe very short, the longest cilia only about one-sixth as long as the greatest width of wing. Abdomen almost twice as long as the thorax, widest at base, tapering gradually, then cut off rather truncately, leaving the ovipositor very prominent and distinctly exerted. All tarsi five-jointed (the original description states that the middle tarsi are four-jointed).

Male.—Length 0.35–0.43 mm. Similar to the female but differentiated at once by the antennae. General color is a more soiled or clouded yellowish-orange and the abdomen is almost completely fuscous instead of the distinctive horizontal band. The anterior portion of the mesonotum is more clouded with fuscous. The venation of forewing grayish. Antennae distinctly eight-jointed, with a rather broad, flat general appearance; pedicel short, about one-third the length of the scape, with distinct longitudinal lineate reticulations or markings; remaining joints all with very prominent longitudinal sensoria, those of the first funicle arranged in a slightly more oblique revolving manner with numerous small setae between the sensoria; the first funicle distinctly wider and darker than the others.

AUTOSERICA BRENSKE PRO ASERICA LEWIS (COLEOPTERA: SCARABAEIDAE).

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In recent years there has been a lack of uniformity in the generic name used for that genus of melolonthine scarabs which includes the Asiatic garden beetle, *Autoserica castanea* Arrow, some writers using *Autoserica*, others *Aserica*. Gilbert J. Arrow, in 1927, published his reasons for dropping the name *Autoserica* and substituting *Aserica* for it. Mr. Arrow's conclusions have not been universally accepted and the writer has been asked to examine the case in connection with the International Code and the Opinions rendered by the International Commission on Zoölogical Nomenclature and, on these bases, to recommend the name to be used by the various organizations within the Federal Department of Agriculture. After a study of the case, the writer accepts *Autoserica* Brenske as the correct name for this genus.

The generic name *Aserica* was established by G. Lewis in 1895 for two species, *Serica japonica* Mots. and *S. orientalis* Mots. *Serica japonica* Mots. was definitely designated as genotype by Lewis in the original publication.